

PATENT
09/849,022
Docket 091/005

CLAIM AMENDMENTS

Please Do Not
Enter.
6.2.05
TNT.

1. *(Previously presented)* A method for producing a population of genetically altered human embryonic stem (hES) cells, comprising:
 - a) obtaining a population of hES cells essentially free of feeder cells; and
 - b) transfecting the cells with a polynucleotide while being cultured on an extracellular matrix in a medium conditioned by fibroblast feeder cells, wherein the polynucleotide comprises a protein encoding region operably linked to a promoter that promotes transcription of the encoding region while the cells are undifferentiated, thereby producing genetically altered hES cells that express the protein while undifferentiated.
2. *(Original)* The method of claim 1, further comprising preferentially selecting cells that have been genetically altered with the polynucleotide.
3. *(Previously presented)* The method of claim 1, wherein the human embryonic stem cells are maintained in an environment comprising extracellular matrix components and a conditioned medium produced by collecting medium from a culture of feeder cells.
- 4 & 5. **CANCELLED**
6. *(Previously presented)* The method of claim 1, wherein the polynucleotide is selected from an adenoviral vector, a retroviral vector, and a DNA plasmid complexed with positively charged lipid.
7. **CANCELLED**
8. *(Currently amended)* A cell population comprising undifferentiated human embryonic stem (hES) cells cultured on an extracellular matrix in a medium conditioned by fibroblast feeder cells, wherein the population comprises cells expressing a protein from a heterologous polynucleotide in which an encoding region for the expressed protein is operably linked to a promoter that promotes transcription of the encoding region while the hES cells are undifferentiated.
9. *(Currently amended)* A cell population comprising undifferentiated hES cells cultured on an extracellular matrix in a medium conditioned by fibroblast feeder cells.